## THEETHIC



Winter 2001

## Incorporating Pollution Prevention into Compliance Inspections

—CHRIS SCHROEDER

Recently, the Lincoln–Lancaster County Health Department's (LLCHD) Air Pollution Control Program began using air pollution control compliance inspections as an opportunity to educate and help businesses with pollution prevention (P2) concepts and practices. Typically, a compliance inspection involves

informing businesses what they are doing wrong. This approach often does not really correct the problem and it can block communication between the LLCHD and the regulated community.

Using the compliance assistance approach and



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# The P.2 Corner

## What Does Waste Cost?

Business owners often fail to look at all costs in their processes. They also tend not to compare the real, current costs with the costs of new equipment and practices. Such a comparison often reveals that the new, cleaner way of doing business can, in

the long run, save money.

Many businesses in the coatings industry keep doing business as usual because they have not considered the alternatives. The Coatings Alternative Guide (CAGE) offers an "Economic Tool: The Coatings Guide Cost Tool" that will "help you identify and compare costs involved in converting your current coating processes to accommodate a new coating technology." The electronic work sheet compares the costs of using low solids conventional (SB) coatings with the costs of using epoxy (powder) coatings.

Using this electronic work sheet allows a business owner to consider every relevant cost. When doing

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#### **Nebraska Industrial Paint Show**

-RENEE HELD

Industrial painters, including those who work in metal finishing and autobody shops, will have the opportunity

to learn about the latest techniques and technologies at the Nebraska Industrial Paint Show, hosted by the Nebraska Business Development Center. This event is scheduled for the afternoon of April 9, 2001, and all day April 10. The site is the Lincoln-Holiday Inn, Downtown, 9th and "P" Streets.



On April 9 a plant tour is presently scheduled for Cushman/Textron. The times for this

tour are 10:00 a.m. and 4:30 p.m. Space for the tours is limited. Also on that day, we will hold a

comprehensive, 3-hour long powder coating session coordinated by the Powder Coat Institute. The evening of the 9th will conclude with a reception for the attendees, speakers, sponsors, and vendors.

April 10 will start off with registration and breakfast, followed by break-out sessions all throughout the day. There will be a session entitled "Basics of Electrocoat-Overview of

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### Fluorescent Light Tubes



—RON ERIKSEN, COORDINATOR

SPECIAL WASTE PROGRAM

Fluorescent light tubes are a common business waste; almost all businesses in Lincoln use them. Unfortunately, many companies are not disposing of them properly. One key to proper disposal is to be aware that there are two types of light tubes on the market today.

The first type of light tube is the old style light tubes that may contain high levels of mercury. The light tubes

contain enough Mercury to pose health hazards to humans and animals, adversely effect surface and groundwater, and be hazardous to landfill and waste haulers. These tubes may not be disposed of in the Lincoln Landfills in any quantity. These tubes must be recycled,



disposed of out of Lancaster County, or handled by a hazardous waste management company.

The second type of tube on the market are the "green tubes." These fluorescent tubes can be identified by green end caps and green lettering on the tube. They are manufactured by GE, Philips, and Osram-Sylvania. Current Health Department regulations allow a company to dispose of up to 43 lbs of these tubes per month in the landfill without a permit. If a company wishes to dispose of more than 43 pounds per month in the landfill, a special waste permit will be required. The cost of the permit is \$200.00. These "green tubes" can also be recycled, disposed of out of county, or handled by a hazardous waste hauler. Businesses are still required to note either type of light tube on the Health Department special waste inventories.

The Health Department has fact sheets available to assist businesses in managing waste of this type. The fact sheets list suppliers and waste recyclers that handle lighting waste. If



you would like to receive a copy of this fact sheet, or if you have questions concerning lighting waste, please call Ron Eriksen, Special Waste Program Coordinator, at (402) 441-6238.

#### 2001 Environmental Awards



—HARRY HEAFER, COORDINATOR
KEEP LINCOLN & LANCASTER COUNTY BEAUTIFUL

The Lincoln-Lancaster County Health Department and Public Works and Utilities Department, cosponsors of the

Lincoln-Lancaster County Environmental Awards, are requesting award nominations. There are many individuals, businesses and groups in Lincoln and

Lancaster County that deserve recognition. Anyone can nominate an individual, business, community group, school, or youth/youth group for an Environmental Award in one or more of the following categories:



- Ø Pollution Prevention—Preventing pollution and waste from being created, toxics reduction
- Waste Reduction and Recycling—Reduction in the amount of waste sent to the landfill, and recycling
- Ø **Water Conservation**—Reduction in water use
- Clean-up/Beautification—Improvement of the visual quality of an area
- Residential/Commercial Development—Reducing waste during construction, utilizing "green building" techniques, reducing impact on the environment, and/ or energy efficiency
- Environmental Education/Awareness—New or unique efforts for providing or supporting environmental education programs; increasing awareness about local environmental issues

Deadline for nominations is March 16. For more information or to obtain a nomination form, call (402) 441-8035.

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#### Industrial Paint Show (Continued from Page 1)

Electrocoat Process and Technology." This session will provide an electrocoat system overview. It will cover markets served, advantages, disadvantages and an explanation of the different chemistries-anodic, cathodic, epoxies and acrylics. There will be a session about regulatory developments: VOC & HAPS Issues. The Coatings industry is facing regulations covering 95% of the industrial OEM application market. This session will provide an overview of the regulations: pending and current and the development schedule.

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#### WHAT DOES WASTE COST?

#### (CONTINUED FROM PAGE 1)

analyses of this type, business owners sometimes overlook certain costs or do not account for the full cost of a process, activity, material, or product. This guide compares costs in the following areas:

- Applied Materials—includes the cost of paints and values for the characteristics of paint such as volatile organic content (VOC) of the paint, and transfer efficiency.
- Equipment—includes preparation equipment, basic equipment, compressor, piping, and expected life of the equipment.
- p Energy—includes conveyor weights, conveyor load, and incinerator temperature.
- b Labor & Maintenance—includes costs of wages, hours per shift, how many days the business operates per year, maintenance costs, and replacement parts.
- b Waste—includes filters, 55-gallon drums, cleanup hours per shift, amount of sludge produced, and sludge disposal.
- b Miscellaneous/Other—includes testing, training, liability, and rework.

The tool includes default values, but businesses can input true values based on their own practices, the products they purchase, and wages in their area. A business owner can accept the default values or enter the current costs of materials, wages, equipment, and other factors. Entering the current costs gives owners a better understanding of all aspects of their businesses.

Often, costs are lumped together as "the cost of doing business" or as "overhead." The electronic work sheet forces owners to break costs down and assign them to the proper activity or equipment.

Owners then enter the costs of the alternative product or process. Again, owners can use the default values in the tool. Some of these costs are available through vendors, websites, trade shows and associations, or

other sources. Some costs, such as salaries and benefits, will be the same as costs and values in both columns.

The Coatings Guide Cost Tool includes a calculation function that gives a bottom line value. This value provides the business owner with a clear picture of the savings that comes from switching from one type of coating system to another.

Many business owners think they cannot afford to make changes that will reduce waste. Often, they cannot afford not to make them. The CAGE "Coatings Guide Cost Tool" helps business owners graphically see the difference between two types of coatings and should help make informed decisions for their business.

For more information, go to the CAGE webpage that contains the economic tool. The web address is http://cage.rti.org/economics/index.cfm. The LLCHD has not tested this tool and has not contacted anyone else who has. Business owners are advised to try it before they commit to any decision or course of action.

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#### **Incorporating P2**

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introducing P2 to the business during the inspection process, the LLCHD can educate businesses about better practices on the spot.

The main goal for integrating pollution prevention into compliance inspections is to reduce health and environmental risks beyond those gained through compliance. This approach also allows us to offer better outreach service to small businesses. In addition, the LLCHD's technical assistance program (TAP) is more effective when we have on-site contact with business owners and managers rather than making contact only by phone or mail.

Typically, the LLCHD Environmental Engineer brings fact sheets that address specific processes, chemicals, or waste streams within the facility. For example, the LLCHD has developed fact sheets for the



autobody industry on the use high volume low pressure spray guns and executing correct spray gun technique to achieve increased paint transfer. The LLCHD engineer can point out ways that the business can

#### Nebraska Industrial Paint Show (Continued from Page 1)

Sessions will also cover topics such as best practices for chemical control and maintenance of the finishing system, introductory and advanced powder coating, a comparison of liquid spray technologies, top shop hazards for metal finishers, compliant solvents for paints and coatings, cost analysis for finishing systems, and best practices for waste minimization and disposal of painting wastes. In addition, there will be many more topics, each presented by experts in their fields. We will wrap up the conference with a Panel Discussion including all speakers covering from pretreatment to cleanup of the paint operation.

All presentations provided by the speakers will be printed up in a proceedings book. This will allow attendees to have all session information. We have space for about 22 tabletop booths in the main eating and break area and possibly up to 4 in the break out session area.

> For more information contact: Renee Held NMEP/NBDC/UNO 1618 14th Street Columbus, NE 68601 (402) 564-0105 rheld@megavision.com

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#### **INCORPORATING P2**

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reduce waste and save money immediately. While discussing a topic, the engineer can refer to the fact sheets and leave a copy at the business.

Because suggestions are made immediately, as soon as a P2 opportunity or a potential problem is identified, they make more sense to business owners and their staff. They can ask any questions while the engineer is there to answer them. This new direction in providing compliance assistance and P2 technical assistance during compliance inspections creates better opportunities for communication between businesses and the LLCHD.

In the future, LLCHD will be developing additional fact sheets for other business sectors or industry types corresponding to our inspection schedule. The LLCHD welcomes and encourages any input or suggestions for new facts sheets. Please contact Phil Rooney or Chris Schroeder at 441-8040.

#### **Lincoln-Lancaster County Health Department**

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http://www.ci.lincoln.ne.us/city/health/environ/pollu/

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Please circulate this issue among your staff and coworkers.

The Ethic is published quarterly by the Lincoln-Lancaster County Health Department and is distributed to Special Waste Permit holders and other businesses in Lincoln and Lancaster County.

For more information or for P2 technical assistance, call 441-8040.